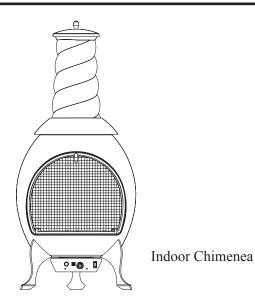


INSTALLATION INSTRUCTIONS AND OWNER'S MANUAL



Installer: Leave this manual with the appli-

ance.

Consumer: Retain this manual for future refer-

ence.

WARNING: If the information in these instructions are not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- WHAT TO DO IF YOU SMELL GAS
 - Do not try to light any appliance.
 - Do not touch any electrical switch; do not use any phone in your building.
 - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
 - If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency or the gas supplier.

INDOOR UNVENTED
GAS FIREPLACE
MODEL
CHBR-16-3



EFFECTIVE DATE AUGUST 2006

This appliance may be installed in an aftermarket, permanently located, manufactured (mobile) home, where not prohibited by local codes.

This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases.

This is an unvented gas-fired heater. It uses air (oxygen) from the room in which it is installed. Provisions for adequate combustion and ventilation air must be provided. Refer to page 7.

WARNING: If not installed, operated and maintained in accordance with the manufacturer's instructions, this product could expose you to substances in fuel or from fuel combustion which can cause death or serious illness.

WATER VAPOR: A BY-PRODUCT OF UNVENTED ROOM HEATERS

Water vapor is a by-product of gas combustion. An unvented room heater produces approximately one (1) ounce (30ml) of water for every 1,000 BTU's (.3KW's) of gas input per hour. Refer to page 6.

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IMPORTANT SAFETY INFORMATION

- An unvented room heater having an input rating of more than 10,000 Btu per hour shall not be installed in a bedroom or bathroom.
- An unvented room heater having an input rating of more than 6,000 Btu per hour shall not be installed in a bathroom.
- Never burn solid fuels in a fireplace where a gas log set is installed.
- Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.
- Do not place clothing or other flammable material on or near the appliance.
- Children and adults should be alerted to the hazards of high surface temperature and should stay away to avoid burns or clothing ignition.
- Young children should be carefully supervised when they are in the same room as the appliance.
- This unit complies with ANSI Z21.11.2 Unvented Heaters.
- Correct installation of ceramic fiber logs, proper location of the heater and annual cleaning are necessary to avoid potential problems with sooting. Sooting, resulting from improper installation or operation, can settle on surfaces outside the fireplace.
- Avoid any draft s that could alter burner flame patterns. Do not allow fans to blow directly into the fireplace. Do not place a blower inside of firebox. Ceiling fans may create drafts that alter burner flame patterns. Sooting and improper burning will occur as a result of drafts.
- The installation must conform with local codes or, in the

- absence of local codes, with the National Fuel Gas Code, ANSI Z223.1 (latest edition) and to the National Electrical Code, ANSI/NFPA70 (latest edition).
- NOTE: Installation and repair should be done by a qualified service person. The appliance should be inspected before use and at least annually by a qualified service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etc. It is imperative that the control compartment, burners and circulating air passageways of the appliance be kept clean.
- Any safety screen or guard removed for servicing an appliance must be replaced prior to operating the appliance. Provide adequate combustion and ventilation air.
- The flow of combustion and ventilation air MUST NOT be obstructed.
- Provide adequate clearances around air openings into the combustion chamber and adequate accessibility clearance for servicing and proper operation. NEVER obstruct the front opening of the appliance.
- A fireplace screen must be in place when the appliance is operating and, unless other provisions for combustion air are provided, the screen shall have an opening(s) for introduction of combustion air.
 - WARNING: Do not allow fans to blow directly into the fireplace. Avoid any drafts that alter burner flame patterns.
 - WARNING: Do not use a blower insert, heat exchanger insert or other accessory not approved for use with heater.

WARNING

When used without adequate combustion and ventilation air, heater may give off CARBON MONOXIDE, an odorless, poisonous gas.

Do not install heater until all necessary provisions are made for combustion and ventilation air. Consult the written instructions provided with the heater for information concerning combustion and ventilation air. In the absence of instructions, refer to the National Fuel Gas Code, ANSI Z223.1, Section 5.3 or applicable local codes.

This heater is equipped with a PILOT LIGHT SAFETY SYSTEM designed to turn off the heater if not enough fresh air is available.

DO NOT TAMPER WITH PILOT LIGHT SAFETY SYSTEM!

If heater shuts off, do not relight until you provide fresh air.

If heater keeps shutting off, have it serviced. Keep burner and control compartment clean.

CARBON MONOXIDE POISONING MAY LEAD TO DEATH.

Early signs of carbon monoxide poisoning resemble the flu, with headache, dizziness and/or nausea. If you have these signs, heater may not be working properly. Get fresh air at once! Have heater serviced.

Some people – pregnant women, persons with heart or lung disease, anemia, those under the influence of alcohol, those at high altitudes – are more affected by carbon monoxide than others.

The pilot light safety system senses the depletion of oxygen at its location. If this heater is installed in a structure having a high vertical dimension, the possibility exists that the oxygen supply at the higher levels will be less than that at the heater. In this type of application, a fan to circulate the structure air will minimize this effect. The use of this fan will also improve the comfort level in the structure. When a fan is used to circulate air, it should be located so that the air flow is not directed at the burner.

SAFETY INFORMATION FOR USERS OF LP-GAS

Propane (LP-Gas) is a flammable gas which can cause fires and explosions. In its natural state, propane is odorless and colorless. You may not know all the following safety precautions which can protect both you and your family from an accident. Read them carefully now, then review them point

by point with the members of your household. Someday when there may not be a minute to lose, everyone's safety will depend on knowing exactly what to do. If, after reading the following information, you feel you still need more information, please contact your gas supplier.

LP-GAS WARNING ODOR

If a gas leak happens, you should be able to smell the gas because of the odorant put in the LP-Gas.

That's your signal to go into immediate action!

- Do not operate electric switches, light matches, use your phone. Do not do anything that could ignite the gas.
- Get everyone out of the building, vehicle, trailer, or area. Do that IMMEDIATELY.
- Close all gas tank or cylinder supply valves.
- LP-Gas is heavier than air and may settle in low areas such as basements. When you have reason to suspect a gas leak, keep out of basements and other low areas. Stay out until firefighters declare them to be safe.
- Use your neighbor's phone and call a trained LP-Gas service person and the fire department. Even though you may not continue to smell gas, do not turn on the gas again. Do not re-enter the building, vehicle, trailer, or area.
- **Finally**, let the service man and firefighters check for escaped gas. Have them air out the area before you return. Properly trained LP-Gas service people should repair the leak, then check and relight the gas appliance for you.

NO ODOR DETECTED - ODOR FADE

Some people cannot smell well. Some people cannot smell the odor of the chemical put into the gas. You must find out if you can smell the odorant in propane. Smoking can decrease your ability to smell. Being around an odor for a time can affect your sensitivity or ability to detect that odor. Sometimes other odors in the area mask the gas odor. People may not smell the gas odor or their minds are on something else. Thinking about smelling a gas odor can make it easier to smell.

The odorant in LP-gas is colorless, and it can fade under some circumstances. For example, if there is an underground leak, the movement of the gas through soil can filter the odorant. Odorants

in LP-Gas also are subject to oxidation. This fading can occur if there is rust inside the storage tank or in iron gas pipes.

The odorant in escaped gas can adsorb or absorb onto or into walls, masonry and other materials and fabrics in a room. That will take some of the odorant out of the gas, reducing its odor intensity.

LP-Gas may stratify in a closed area, and the odor intensity could vary at different levels. Since it is heavier than air, there may be more odor at lower levels. Always be sensitive to the slightest gas odor. If you detect any odor, treat it as a serious leak. Immediately go into action as instructed earlier.

SOME POINTS TO REMEMBER

- Learn to recognize the odor of LP-gas. Your local LP-Gas
 Dealer can give you a "Scratch and Sniff" pamphlet. Use it
 to find out what the propane odor smells like. If you suspect
 that your LP-Gas has a weak or abnormal odor, call your
 LP-Gas Dealer.
- If you are not qualified, do not light pilot lights, perform service, or make adjustments to appliances on the LP-Gas system. If you are qualified, consciously think about the odor of LP-Gas prior to and while lighting pilot lights or performing service or making adjustments.
- Sometimes a basement or a closed-up house has a musty smell that can cover up the LP-Gas odor. Do not try to light pilot lights, perform service, or make adjustments in an area where the conditions are such that you may not detect the odor if there has been a leak of LP-Gas.
- Odor fade, due to oxidation by rust or adsorption on walls
 of new cylinders and tanks, is possible. Therefore, people
 should be particularly alert and careful when new tanks or
 cylinders are placed in service. Odor fade can occur in new
 tanks, or reinstalled old tanks, if they are filled and allowed

- to set too long before refilling. Cylinders and tanks which have been out of service for a time may develop internal rust which will cause odor fade. If such conditions are suspected to exist, a periodic sniff test of the gas is advisable. If you have any question about the gas odor, call your LP-gas dealer. A periodic sniff test of the LP-gas is a good safety measure under any condition.
- If, at any time, you do not smell the LP-Gas odorant and you think you should, assume you have a leak. Then take the same immediate action recommended above for the occasion when you do detect the odorized LP-Gas.
- If you experience a complete "gas out," (the container is under no vapor pressure), turn the tank valve off immediately. If the container valve is left on, the container may draw in some air through openings such as pilot light orifices. If this occurs, some new internal rusting could occur. If the valve is left open, then treat the container as a new tank. Always be sure your container is under vapor pressure by turning it off at the container before it goes completely empty or having it refilled before it is completely empty.

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INTRODUCTION

IMPORTANT: Read all instructions carefully before starting installation. Failure to follow these installation instructions may result in a possible fire hazard and will void the warranty.

Save this manual for future reference.

Please read this manual before installing and using the appliance.

Instructions to Installer

- Installer must leave instruction manual with owner after installation.
- 2. Installer must have owner fill out and mail warranty card supplied with unvented room heater.
- 3. Installer should show owner how to start and operate unvented room heater.

Always consult your local Building Department regarding regulations, codes or ordinances which apply to the installation of an unvented room heater.

This appliance may be installed in an aftermarket* manufactured (mobile) home, where not prohibited by state or local codes.

*Aftermarket: Completion of sale, not for purpose of resale, from the manufacturer.

This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases.

Any alteration of the original design, installed other than as shown in these instructions or use with a type of gas not shown on the rating plate is the responsibility of the person and company making the change.

Qualified Installing Agency

Installation and replacement of gas piping, gas utilization equipment or accessories and repair and servicing of equipment shall be performed only by a qualified agency. The term "qualified agency" means any individual, firm, corporation, or company that either in person or through a representative is engaged in and is responsible for (a) the installation, testing, or replacement of gas piping or (b) the connection, installation, testing, repair, or servicing of equipment; that is experienced in such work; that is familiar with all precautions required, and that has complied with all the requirements of the authority having jurisdiction.

State of Massachusetts: The installation must be made by a licensed plumber or gas fitter in the Commonwealth of Massachusetts.

Sellers of unvented propane or natural gas-fired supplemental room heaters shall provide to each purchaser a copy of 527 CMR 30 upon sale of the unit.

In the State of Massachusetts the CHBR-16 must be secured to the floor.

The installation must conform with local codes or, in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1.*
*Available from the American National Standards Institute, Inc. 11 West 42nd St., New York, N.Y. 10018.

Manifold Pressure			
Natural Gas		Propan Gas	
Regulator pressure setting	3.5" W.C.	Regulator pressure setting	10.0" W.C.
Gas inlet pressure	Max. 10.5" W.C.	Gas inlet pressure	Max 13.0" W.C.
	Min. 5.0" W.C.		Min. 11.0" W.C.

SPECIFICATIONS

Model	CHBR-16	
Input Maximum Btu/Hr Minimum Btu/Hr	20,000 14,000	
Height	49"	
Width	23"	
Gas Inlet	3/8"	

ACCESSORIES

Product	Description
No.	Description
CHG-VF	Antique Green Chimenea
CHR-VF	Terra Cotta Red Chimenea
FRBC-1	Battery Operated Remote Control
FRBTC-1	Battery Operated Remote Control with Thermostat
FREC-1	Electri Remote Control
FWS-1	Wall Switch

GENERAL INFORMATION

This is an unvented gas-fired heater. It uses air (oxygen) from the room in which it is installed. Provisions for adequate combustion and ventilation air must be provided.

Keep room area clear and free from combustible materials, gasoline and other flammable vapors and liquids.

Unvented gas heaters are a supplemental zone heater. They are not intended to be a primary heating appliance. Water vapor produced by an unvented heater can create moisture problems in a home when operated for extended periods of time.

During manufacturing, fabricating and shipping, various components of this appliance are treated with certain oils, films or bonding agents. These chemicals are not harmful but may produce annoying smoke and smells as they are burned off during the initial operation of the appliance; possibly causing headaches or eye or lung irritation. This is a normal and temporary occurrence.

The initial break-in operation should last 2-3 hours with the burner at the highest setting. Provide maximum ventilation by opening windows or doors to allow odors to dissipate. Any odors remaining after this initial break-in period will be slight and will disappear with continued use.

Do not use this room heater if any part has been under water. Immediately call a qualified service technician to inspect the room heater and replace any part of the control system and any gas control which has been under water.

Before you get started

Carefully inspect the contents for shipping damage. If any parts are missing or damaged, immediately inform the dealer from whom you purchased the appliance. Do not attempt to install any part of the appliance unless you have all parts in good condition.

Installation on Rugs and Tile

If this appliance is to be installed directly on carpeting, tile, or other combustible material, other than wood flooring, the appliance shall be installed on a metal or wood panel extending the full width and depth of the appliance.

The base referred to above does not mean the fire-proof base as used on wood stoves. The protection is primarily for rugs that may be extremely thick and light-color tile that can discolor.

Make sure you have received all parts:

Check your packing list to verify that all listed parts have been received. You should have the following:

- Gas log grate/burner assembly.
- Five (5) ceramic fiber logs.

- Plastic bag containing glowing embers (rock wool) for burner coverage.
- Plastic bag containing lava rock.

Millivolt controlled heater designed to be operated with optional devices for ON/OFF functions.

- Wall switch or thermostat with wire.
- Hand held remote control with ON/OFF switch or thermostat.

Handle the gas log burner assembly by the grate and legs only. Do not pick the unit up by the burner.

Gloves are recommended when handling ceramic fiber logs to prevent skin irritation from loose fibers. Logs are fragile - Handle with care.

Important

All correspondence should refer to complete Model Number, Serial Number and type of gas.

Attention: During initial use of ceramic log you will detect an odor as the ceramic log is cured.

Notice: During initial firing of this unit, its paint will bake out, and smoke will occur. To prevent triggering of smoke alarms, ventilate the room in which the unit is installed.

WARNING: Any modification to this unvented gas heater or its controls can be dangerous. Improper installation or use of the heater can cause serious injury or death from fire, burns, explosion or carbon monoxide poisoning.

Well Head Gas Installations

Some natural gas utilities use "well head" gas. This may affect the Btu output of the unit. Contact the gas company for the heating value. Contact the manufacturer or your gas company before changing spud/orifice size.

WARNING: This appliance is equipped for (natural gas or propane) gas. Field conversion is not permitted.

High Altitudes: For altitudes/elevation above 2,000 feet ratings should be reduced at the rate of 4 percent for each 1,000 feet above sea level. Contact the manufacturer.

WATER VAPOR: A BY-PRODUCT OF UNVENTED ROOM HEATERS

Water vapor is a by-product of gas combustion. An unvented room heater produces approximately one (1) ounce (30ml) of water for every 1,000 BTU's (.3KW's) of gas input per hour.

Unvented room heaters must be used as supplemental heat (a room) rather than a primary heat source (an entire house). In most supplemental heat applications, the water vapor does not create a problem. In most applications, the water vapor enhances the low humidity atmosphere experienced during cold weather.

The following steps will help insure that water vapor does not become a problem.

- 1. Be sure the heater is sized properly for the application, including ample combustion air and circulation air.
- 2. If high humidity is experienced, a dehumidifier may be used to help lower the water vapor content of the air.
- 3. Do not use an unvented room heater as the primary heat source (an entire house).

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PROVISIONS FOR ADEQUATE COMBUSTION & VENTILATION AIR

Provisions for Adequate Combustion and Ventilation Air This heater shall not be installed in a confined space or unusually tight construction unless provisions are provided for adequate combustion and ventilation air.

The National Fuel Gas Code, ANSI Z223.1 defines a confined space as a space whose volume is less than 50 cubic feet per 1,000 Btu per hour (4.8m³ per kw) of the aggregate input rating of all appliances installed in that space and an unconfined space as a space whose volume is not less than 50 cubic feet per 1,000 Btu per hour (4.8m³ per kw) of the aggregate input rating of all appliances installed in that space. Rooms communicating directly with the space in which the appliances are installed, through openings not furnished with doors, are considered a part of the unconfined space.

The following example is for determining the volume of a typical area in which the CHBR-16 may be located and for determining if this area fits the definition of an unconfined space.

The maximum6 input of the CHBR-16 is 20,000 Btu per hour. Based on the 50 cubic feet per 1,000 Btu per hour formula, the minimum area that is an unconfined space for installation of the CHBR-16 is 1,000 cubic feet, 50 cubic feet x 20 = 1,000 cubic feet. To determine the cubic feet of the area in which the CHBR-16 is to be installed, measure the length, width and height of the area. Example: The area measures 16 feet in length, 12 feet in width and 8 feet in height, the area is 1,536 cubic feet. The CHBR-16 can be installed in this unconfined space with no requirement to provide additional combustion and ventilation air.

Warning: If the area in which the heater may be operated is smaller than that defined as an unconfined space or if the building is of unusually tight construction, provide adequate combustion and ventilation air by one of the methods described in the National Fuel Gas Code, ANSI Z223.1, Section 5.3 or applicable local codes.

Unusually Tight Construction

The air that leaks around doors and windows may provide enough fresh air for combustion and ventilation. However, in buildings of unusually tight construction, you must provide additional fresh air.

Unusually tight construction is defined as construction where:

- a. Walls and ceilings exposed to the outside atmosphere have a continuous water vapor retarder with a rating of one perm or less with openings gasketed or sealed, and
- b. Weatherstripping has been added on openable windows and doors, and
- c. Caulking or sealants are applied to areas such as joints around window and door frames, between sole plates and floors, between wall-ceiling joints, between wall panels, at penetrations for plumbing, electrical, and gas lines, and at other openings.

If the heater is installed in a building of unusually tight construction, adequate air for combustion, ventilation and dilution of flue gases shall be provided in accordance with ANSI Z223.1/NFPA54.

CLEARANCES

24"

Figure 1

CLEARANCES

Minimum Clearances From Combustible Construction

(Figures 2 and 3) Side 2" 2" 24" Rear Top Floor

Combustible

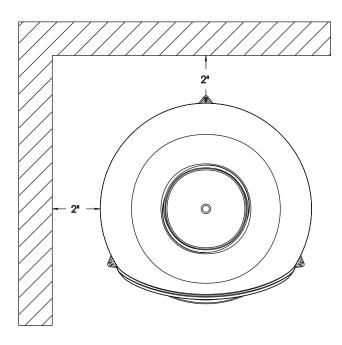


Figure 2

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GAS SUPPLY

Check all local codes for requirements, especially for the size and type of gas supply line required.

Recommended Gas Pipe Diameter

Pipe Length	Schedule 40 Pipe Inside Diameter		Tubing, Type L Outside Diameter	
	Nat.	L.P.	Nat.	L.P.
0-10 feet	1/2"	3/8"	1/2"	3/8"
0-3 meters	12.7mm	9.5mm	12.7mm	9.5mm
10-40 feet	1/2"	1/2"	5/8"	1/2"
4-12 meters	12.7mm	12.7mm	15.9mm	12.7mm
40-100 feet	1/2"	1/2"	3/4"	1/2"
13-30 meters	12.7mm	12.7mm	19mm	12.7mm
100-150 feet	3/4"	1/2"	7/8"	3/4"
31-46 meters	19mm	12.7mm	22.2mm	19mm

Note: Never use plastic pipe. Check to confirm whether your local codes allow copper tubing or galvanized.

Note: Since some municipalities have additional local codes, it is always best to consult your local authority and installation code.

Installing a New Main Gas Cock

Each appliance should have its own manual gas cock.

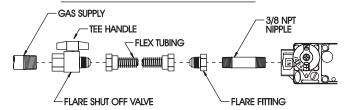
A manual main gas cock should be located in the vicinity of the unit. Where none exists, or where its size or location is not adequate, contact your local authorized installer for installation or relocation.

Compounds used on threaded joints of gas piping shall be resistant to the action of liquefied petroleum gases. The gas lines must be checked for leaks by the installer. This should be done with a soap solution watching for bubbles on all exposed connections, and if unexposed, a pressure test should be made.

Never use an exposed flame to check for leaks. Appliance must be disconnected from piping at inlet of control valve and pipe capped or plugged for pressure test. Never pressure test with appliance connected; control valve will sustain damage!

A gas valve and ground joint union should be installed in the gas line upstream of the gas control to aid in servicing. It is required by the National Fuel Gas Code that a drip line be installed near the gas inlet. This should consist of a vertical length of pipe tee connected into the gas line that is capped on the bottom in which condensation and foreign particles may collect.

FLEXIBLE GAS LINE CONNECTION



RIGID GAS LINE CONNECTION

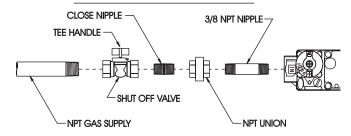


Figure 3

The use of the following gas connectors is recommended:

- ANS Z21.24 Appliance Connectors of Corrugated Metal Tubing and Fittings
- ANS Z21.45 Assembled Flexible Appliance Connectors of Other Than All-Metal Construction

The above connectors may be used if acceptable by the authority having jurisdiction. The state of Massachusetts requires that a flexible appliance connector cannot exceed three feet in length.

Pressure Testing of the Gas Supply System

- To check the inlet pressure to the gas valve, a 1/8" (3.175mm) N.P.T. plugged tapping, accessible for test gauge connection, must be placed immediately upstream of the gas supply connection to the appliance.
- 2. The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (3.5 kPa).
- 3. The appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (3.5 kPa).

Attention! If one of the procedures results in pressures in excess of 1/2 psig (14" w.c.) (3.5 kPa) on the appliance gas valve, it will result in a hazardous condition.

SET-UP INSTRUCTIONS

Attention: Two people are required to assemble indoor chimenea.

- 1. Remove packing material from top of box.
- 2. Lift stack casting section out and set aside.
- Remove remaining items and packing from inside body casting.
- 4. Lift body casting out of box and sit on flat surface near desired final location. Leave adequate room around body casting to work. Locking ring for stack casting should be facing down. Two people are required to remove casting from shipping carton.
- 5. Remove washers and nuts from three legs. Install the three legs using the bolts, washers and nuts provided. Reach through the opening in the body casting to tighten the leg bolts securely. See Figure 4.



Figure 4

- 6. Remove the bottom block off plate from stack casting. The bottom block off plate is a half-moon shaped, 11 inch length, black metal plate located within the stack casting.
- 7. Place bottom block off plate onto exterior, bottom of body casting. Align clearance holes in bottom block off plate with bolt holes in body casting.
- 8. Place a lock washer followed by a flat washer onto 3/8 inch bolt. You will need to use three (3) 3/8 inch bolts to attach bottom block off plate to body casting.
 - Attention: Start each bolt partially into body casting in order to properly align bolts for attachment of bottom block off plate to body casting.
- 9. Invert the body casting to sit on its legs.
- 10. Holding the burner support plate securely with two hands, tip the burner assembly to a position where it will fit through the front door opening. Guide the gas valve through the large hole in the bottom of the body casting. The burner support plate will come to rest on the three flat mounting tabs that protrude from the body casting wall and the gas valve should be approximately centered between the left leg and the right leg.
- 11. Align clearance hole on burner support plate with threaded hole in front of flat mounting tab. Attach burner support plate to mounting tab with one (1) 1/4-20 x 3/8" screw. Install (2) 3-1/2" bolts through burner support bottom, casting bottom and block off plate and secure with (2) nuts.
- 12. One (1) keyhole will be adjacent to front side (opening) on body casting. Two (2) keyholes will be adjacent to back side

(rear) on body casting. Attention: If the keyhole positions are reversed on body casting DO NOT attempt to operate the indoor chimenea. An unsafe overheating condition of the wall could occur. Contact your qualified serviceman or dealer for replacement parts. See Figure 5.

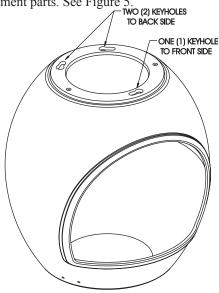
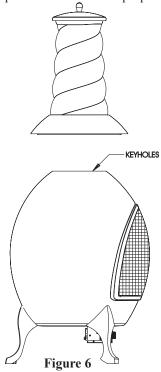


Figure 5

- 13. Located on bottom of stack casting are three securing bolts. Unscrew securing bolts approximately 1/2". Attention: Do not remove securing bolts from bottom of stack casting. Place the stack casting on top of the body casting aligning the three securing bolts on the stack casting with the large end of the "keyhole" slots on the securing ring. Once the stack casting is in place, twist to lock it down. See Figure 6.
- 14. To install door screen, hook top of door screen onto body casting. Raise door screen upward. Pivot bottom of door screen inward to hook bottom of door screen, and then lower screen. Do not operate without screen properly installed.



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PLACEMENT OF GLOWING EMBERS AND LAVA ROCK

Placement of the glowing embers (rock wool) is very individual and light coverage of the areas indicated will provide your best effects. We recommend separation of the rock wool by hand and make your coverage as light and fluffy as possible.

Place just enough embers on the burner to obtain the glow and a gold yellow flame.

Do not place embers (rock wool) over large ports in rear portion of burner.

A thin layer of glowing embers (rock wool) should be placed under open space between the right and left middle logs.

Rock wool should not be placed in the area of the pilot assembly.

Replacement of loose material (glowing embers) must be purchased from Empire Comfort Systems, Inc. Application of excess loose material (glowing embers) may adversely affect performance of the heater. WARNING: All previously applied loose material must be removed prior to reapplication.

Refer to Parts List, Page 18 to order loose material (rock wool).

Placing Lava Rock in Front of Burner on Burner Support Plate Spread lava rocks on burner support plate in front of the burner pan. The lava rocks are for decorative effect and are not required for fireplace operation.

ATTENTION: DO NOT PLACE LAVA ROCKS ON BURNER, LOGS OR ROCK WOOL. THE LAVA ROCKS SHOULD ONLY BE PLACED ON THE BURNER SUPPORT PLATE.

OPERATION INSTRUCTIONS/FLAME APPEARANCE

Flames from the pilot (rear right back side of the pan burner) as well as the main flame should be visually checked as the log set is installed.

In normal operation at full rate after 10 to 15 minutes, the flame appearance should be sets of yellow flames.

NOTE: All flames will be random by design, flame height will go up and down.

Glowing embers (rock wool) can cover the pan burner in between the front and middle logs, but very little is necessary to cover this area. Excess ember material causes the yellow flame to become orange and stringy. Apply just enough to obtain slow glow and a gold yellow flame.

Avoid any drafts that alter burner flame patterns. Do not allow fans to blow directly into fireplace. Do not place a blower inside the burner area of the firebox. Ceiling fans may create drafts that alter flame patterns. Sooting and improper burning will result.

During manufacturing, fabricating and shipping, various components of this appliance are treated with certain oils, films or bonding agents. These chemicals are not harmful, but may produce annoying smoke and smells as they are burned off during the initial operation of the appliance, possibly causing headaches or eye or lung irritation. This is a normal and temporary occurrence.

The initial break-in operation should last 2-3 hours with the burner at the highest setting. Provide maximum ventilation by opening windows or doors to allow odors to dissipate. Any odors remaining after this initial break-in will be slight and will disappear with continued use.

THERMOSTAT OPERATION

Millivolt Control has four (4) positions

Off – All gas to set is completely off at the valve.

Pilot – Valve position to light/maintain the standing pilot.

Low – Minimum gas rate - pleasing yellow flames - glowing embers.

High – Maximum gas rate - pleasing yellow flames - glowing embers.

Ignition – Piezo Ignitor allows lighting of the pilot without matches.

Pilot – All gas log heaters are designed with safety pilot systems that will shut down when the level of oxygen available in the room is low. The pilot will only relight when adequate fresh air is available.

Thermo – All millivolt logs are fitted with a thermo generator to provide millivolt power to activate switches, remote controls or thermostats.

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CHBR-16 LIGHTING INSTRUCTIONS

FOR YOUR SAFETY READ BEFORE LIGHTING

WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- A. This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.
- B. BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS

- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire

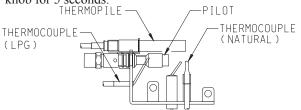
department.

- C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it; call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

LIGHTING INSTRUCTIONS

Note: For easy access to valve for lighting pilot, remove branch log and middle log from burner assembly before lighting.

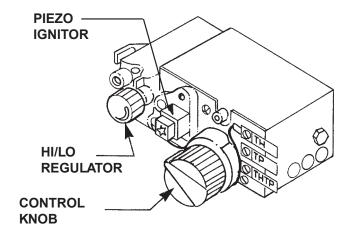
- 1. STOP! Read the safety information label.
- 2. Make sure the manual shutoff valve is fully open.
- 3. This gas log set is equipped with an ignition device (piezo) which lights the pilot. If piezo ignitor does not light the pilot, refer to Step 7.
- 4. Turn gas control knob clockwise to the "OFF" position, set the thermostat to the lowest setting and turn ON/OFF switch to OFF position.
- 5. Wait ten (10) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas STOP! Follow "B" in the safety information label. If you do not smell gas, go to the next step.
- 6. From OFF position, turn the gas control knob counterclockwise to "Pilot" position. Push in and hold control knob for 5 seconds.



7. With the control knob pushed in, repeatedly push the piezo ignitor button until pilot is lit (or use a match to light pilot).

- 8. Continue pushing the control knob in for a further 60 seconds to prevent the flame detector from shutting off the gas while the probe is warming up. Release the control knob.
- Turn gas control knob counterclockwise to the "ON" position.
- 10. After the pilot has been lit for one minute, the burner can be turned on. Turn the ON/OFF switch to "ON" position or adjust thermostat to desired setting.
- 11. If the gas logs will not operate, follow the instructions "To Turn Off Gas To Appliance" and call your service technician or gas supplier.

Wait 30 seconds before readjusting the heater when the control knob has been turned down to a lower setting.

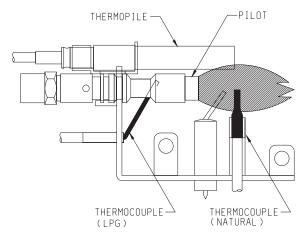


TO TURN OFF GAS TO APPLIANCE

- 1. Turn control knob clockwise to OFF position to completely shut off the heater.
- 2. If applicable: Turn ON/OFF switch to OFF position and/or set thermostat (if present) to lowest setting. If applicable: Turn off all electric power to the heater.

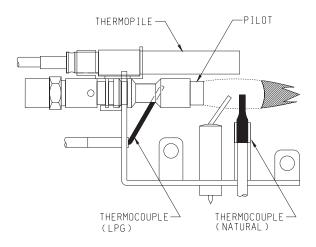
PILOT FLAME CHARACTERISTICS

Figure 7 shows a correct pilot flame pattern. The correct flame will be blue and will extend beyond the thermocouple. The flame will surround the thermocouple just below the tip. A slight yellow flame may occur where the pilot flame and main burner flame meet. Figure 8 shows an incorrect pilot flame pattern. The incorrect pilot flame is not touching the thermocouple. This will cause the thermocouple to cool. When the thermocouple cools, the heater will shut down.



Correct appearance of pilot flame.

Figure 7



Incorrect appearance of pilot flame.

Figure 8

If pilot flame pattern is incorrect, as shown in Figure 8

• See Troubleshooting, page 17.

Cleaning and Maintenance/Pilot

Oxygen Depletion Sensor Pilot (Figure 9)

When the pilot has a large yellow tip flame, clean the Oxygen Depletion Sensor as follows:

- 1. Clean the ODS pilot by loosening nut B from the pilot tubing. When this procedure is required, grasp nut A with an open end wrench.
- 2. Blow air pressure through the holes indicated by the arrows. This will blow out foreign materials such as dust, lint and spider webs. Tighten nut B also by grasping nut A.

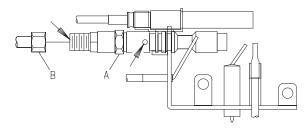


Figure 9

Warning:

Never use needles, wires, or similar cylindrical objects to clean the pilot to avoid damaging the calibrated ruby that controls the gas flow.

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CLEANING AND SERVICING

Annual inspection and cleaning by your dealer or qualified service technician is recommended to prevent malfunction and/or sooting.

TURN OFF HEATER AND ALLOW TO COOL BEFORE CLEANING.

Remove logs, handling carefully by holding gently at each end. Gloves are recommended to prevent skin irritation from ceramic fibers. If skin becomes irritated, wash gently with soap and water. Refer to manual for correct log placement.

PERIODIC CLEANING – Refer to parts diagram for location of items discussed below.

- Do not use cleaning fluid to clean logs or any part of heater.
- Logs brush with soft bristle brush or vacuum with brush attachment.
- Remove loose particles and dust from the burner areas, controls, piezo covers and grate. Don't remove media from inside burner box.
- Inspect and clean burner air intake hole. Remove lint or particles with brush. Failure to keep air intake hole clean will result in sooting and poor combustion.

ANNUAL CLEANING/INSPECTION – Refer to parts diagram for location of items discussed below.

- Inspect and clean burner air intake hole. Remove lint or particles with vacuum or brush. Failure to keep air intake hole clean will result in sooting and poor combustion.
- Inspect and clean all burner ports.
- Inspect ODS pilot for operation and accumulation of lint at air intake holes.
- Verify flame pattern and log placement for proper operation.
- Verify smooth and responsive ignition of main burner.
- Check level of ceramic media in burner. Burner should be full, up to the level of openings in burner top.

Attention: Ceramic media that is dislodged from burner box during shipment can be replaced through openings in burner top. If settling of ceramic media occurs during shipment an additional bag of ceramic media, part number, 12389 can be ordered from Empire Comfort Systems, Inc.

WIRING

Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

Control Panel Installation

- Disconnect black and green wire from TH/TP and TH terminal on valve.
- 2. Insert REMOTE/OFF/ON switch with attached wires through rectangular opening on cover plate.
- 3. Attach black and green wire to TH/TP and TH terminal on valve.
- 4. Attach cover plate to valve bracket with two (2) 8 x 1/2" Truss -head Phillips screws.

Millivolt) thermopile is self powered gas valve and does not require 110 volts. See Figure 10 to provide optional wall switch, thermostat, or remote control. Maximum length of 20 feet of 16 AWG to conductor wires is to be used with all optional switches.

Use the two leads (black/red wires and brown wires) from REMOTE/ON/OFF switch to attach optional components.

Check System Operation

Millivolt system and all individual components may be checked with a millivolt meter 0-1000 MV range.

Remote Receiver

EQUIVALENT.

- 1. The remote receiver can be placed behind the gas valve on under side of chimenea.
- 2. Attach remote receiver to the flat bottom of casing behind gas valve on underside of chimenea.

Refer to remote control installation and operating instructions for more details on remote control.

750 Millivolt System

When you ignite the pilot, the thermocouple produces millivolts (electrical current) which energizes the magnet in the gas valve. After 30 seconds to 1 minute time period you can release the gas control knob and the pilot will stay ON. Allow your pilot flame to operate an additional one (1) to two (2) minutes before you turn the gas control knob from the PILOT position to the ON position. This time period allows the millivolts (electrical current) to buildup to a sufficient level allowing the gas control to operate properly.

Millivolt Control

The valve regulator controls the burner pressure which should be checked at the pressure test point. Turn captured screw counter clockwise 2 or 3 turns and then place tubing to pressure gauge over test point (Use test point "A" closest to control knob). After taking pressure reading, be sure and turn captured screw clockwise firmly to re-seal. Do not over torque. Check for gas leaks.

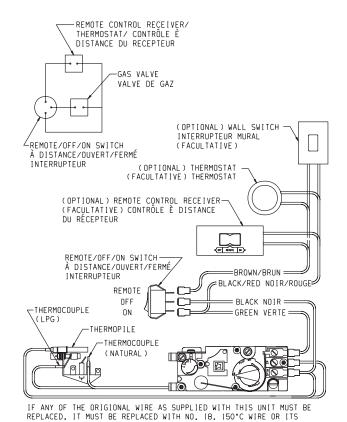


Figure 10

TROUBLESHOOTING SYMPTOMS - POSSIBLE CAUSES AND CORRECTION

Turn appliance OFF and allow to cool before servicing. Only a qualified service person should service and repair the heater.

1. When ignitor button is pressed, there is no spark at ODS/pilot.

- a. Ignitor electrode positioned wrong Replace pilot.
- b. Ignitor electrode is broken Replace pilot.
- c. Ignitor electrode not connected to ignitor cable Reconnect ignitor cable.
- d. Ignitor cable pinched or wet. Keep ignitor cable dry Free ignitor cable if pinched by any metal or tubing.
- e. Broken ignitor cable Replace ignitor cable.

2. Appliance produces unwanted odors.

- a. Appliance burning vapors from paint, hair spray, glues, etc. - Ventilate room. Stop using odor causing products while heater is running.
- b. Gas leak Locate and correct all leaks.

3. Appliance shuts off during use. (Pilot and main burner are off.)

- a. Not enough fresh air is available for ODS/pilot to operateOpen window and/or door for ventilation.
- b. Low line pressure Contact local gas company.
- c. ODS/pilot is partially clogged Clean ODS/pilot.
- d. Defective thermocouple Replace pilot.

4. Appliance shuts off during use. (Pilot stays on.)

- a. Low line pressure Check line pressure to the valve.
- b. Defective thermopile Check pilot flame, check wire connections, output should be a minimum of 325 millivolts across. TH/TP and TP terminals with ON/OFF switch off.

5. Gas odor even when control knob is in OFF position.

- a. Gas leak Locate and correct all leaks.
- b. Control valve defective Replace control valve.

6. When ignitor button is pressed, there is spark at ODS/pilot, but no ignition.

- a. Gas supply turned off or manual shutoff valve closedTurn on gas supply or open manual shutoff valve.
- b. Control knob not in PILOT position Turn control knob to PILOT position.
- c. Control knob not pressed in while in PILOT position- Press in control knob while in PILOT position.
- d. Air in gas lines when installed Continue holding down control knob. Repeat igniting operation until air is removed.
- e. ODS/pilot is clogged Replace ODS/pilot assembly or have it serviced.
- g. Gas regulator setting is not correct Replace gas regulator.

ODS/pilot lights but flame goes out when control knob is released.

- a. Control knob not fully pressed in Press in control knob fully.
- b. Control knob not pressed in long enough After ODS/pilot lights, keep control knob pressed in 30 seconds.

- c. Manual Shutoff valve not fully open Fully open manual shutoff valve.
- d. Thermocouple connection loose at control valve Hand tighten until snug, then tighten 1/4 turn more.
- e. Pilot flame not touching thermocouple, which allows thermocouple to cool, causing pilot flame to go out. This problem could be caused by either low gas pressure or dirty or partially clogged ODS/pilot - Contact local gas company.
- f. Control valve damaged Replace control valve.

8. Burner does not light after ODS/pilot is lit.

- a. Burner orifice clogged Clean burner or replace main burner orifice.
- Burner orifice diameter is too small Replace burner orifice.
- c. Inlet gas pressure is too low Contact qualified service person.

9. If burning at main burner orifice occurs (a loud, roaring blow torch noise).

- a. You must turn off burner assembly and contact a qualified service person.
- Manifold pressure is too low Contact local gas company.
- Burner orifice clogged Clean burner or replace burner orifice.

10. Logs appear to smoke after initial operation.

- a. Vapors from paint or curing process of logs Problem will stop after a few hours of operation. Open a window for the first few hours.
 - Log heater is intended to be smokeless. Turn OFF heater and call qualified service person.

11. Heater produces a whistling noise when main burner is lit.

- a. Turning control knob to HIGH position when main burner is cold Turn control knob to LOW position and let warm up for a minute.
- b. Air in gas line Operate burner until air is removed from line. Have gas line checked by local gas company.
- c. Dirty or partially clogged burner orifice Clean burner or replace burner orifice.

12. No gas to pilot.

 a. LP-regulator shut down due to inlet pressure too high -Verify LP tank regulator is installed and set at 11" to 13" w.c.

If the gas quality is bad, your pilot may not stay lit, the burners may produce soot and the heater may backfire when lit. If the gas quality or pressure is low, contact your local gas supplier immediately.

PARTS LIST

Attention: When ordering parts, it is very important that part number and description of part coincide.

	Part Number	Description	Index No.	Part Number	Description
CHG-VF	AND CHR-V	F PARTS LIST	CHBR-16		
1	R-6477	CHIMENEA STACK CASTING	6	11538	REAR LOG SUPPORT
		ASSEMBLY - RED	7	P-200	ORIFICE FITTING
		(INCLUDES STACK CASTING,	8	P-181	ORIFICE - NAT
		R-6475 KNOB - RED, R-6473	8	P-182	ORIFICE - LP
		CAP - RED)	9	R-5676	AIR SHUTTER - NAT
1	R-6478	CHIMENEA STACK CASTING	9	R-5675	AIR SHUTTER - LP
		ASSEMBLY - GREEN	10	R-3624	PILOT - NAT
		(INCLUDES STACK CASTING,	10	R-3623	PILOT - LP
		R-6476 KNOB - GREEN, R-6474	11	11285	BURNER SUPPORT - LEFT
		CAP - GREEN)	12	12347	BURNER ASSEMBLY - NAT
2	R-6641	MOUNTING RING - RED	12	12348	BURNER ASSEMBLY - LP
2	R-6642	MOUNTING RING - GREEN	13	11948	BURNER SUPPORT - RIGHT
3	R-6479	CHIMENEA BODY CASTING	14	11947	BURNER SUPPORT PLATE
		ASSEMBLY - RED			ASSEMBLY
		(INCLUDES BODY CASTING	15	R-4323	GAS VALVE - NAT
		- RED AND R-6641 MOUNTING	15	R-4324	GAS VALVE - LP
		RING - RED)	16	12975	COVER PLATE
3	R-6480	CHIMENEA BODY CASTING	17	R-3436	REMOTE/OFF/ON SWITCH
		ASSEMBLY - GREEN	NS	R-4579	WIRE HARNESS
		(INCLUDES BODY CASTING	NS	11951	TUBING - VALVE TO PILOT
		- GREEN AND R-6642	NS	11952	TUBING - VALVE TO BURNER
		MOUNTING RING - GREEN)	NS	11833	PILOT SHIELD
4	R-6405	LEGS WITH RUBBER FEET	NS	16001	HARDWARE KIT
		- RED (3 REQ'D)	NS	15998	ROCK WOOL
4	R-6406	LEGS WITH RUBBER FEET	NS	11788	DECORATIVE ROCK
		- GREEN (3 REQ'D)	NS	12389	CERAMIC MEDIA
5	R-6481	CHIMENEA DOOR			
NS	R-6643	BLOCK OFF PLATE			

USE ONLY MANUFACTURER'S REPLACEMENT PARTS. USE OF ANY OTHER PARTS COULD CAUSE INJURY OR DEATH.

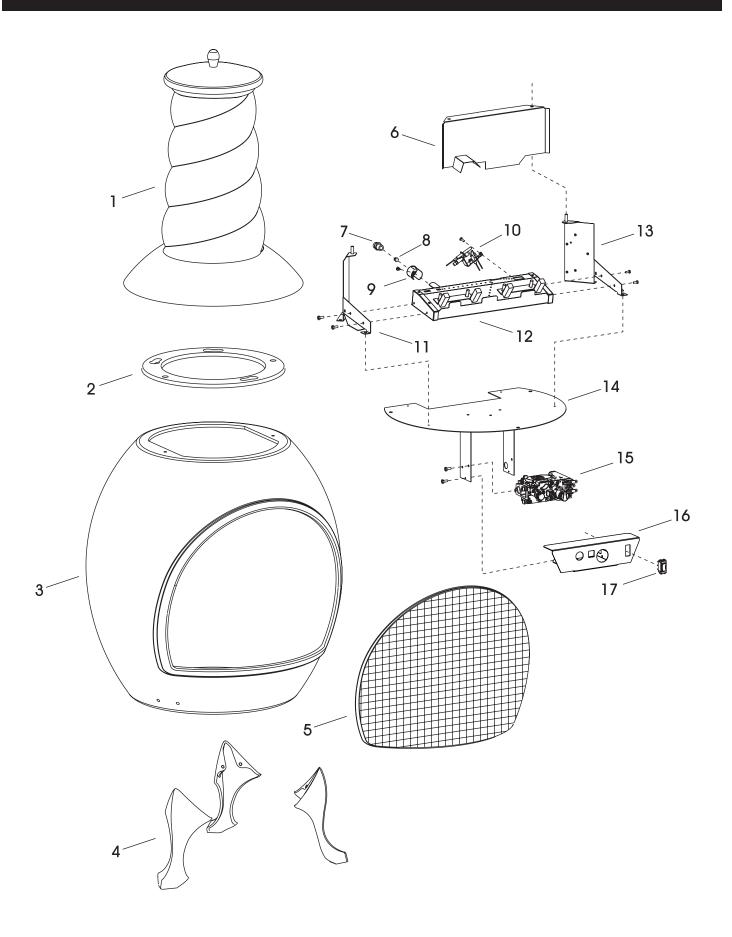
HOW TO ORDER REPAIR PARTS

Parts can be ordered only through your service person or dealer. For best results, the service person or dealer should order parts through the distributor. Parts can be shipped directly to the service person/dealer.

All parts listed in the Parts List have a Part Number. When ordering parts, first obtain the Model Number from the name plate on your equipment. Then determine the Part Number (not the Index Number) and the Description of each part from the following appropriate illustration and list. Be sure to give all this information.

Applaince Model Number	Part Description
Appliance Serial Number	Part Number
Type of Gas (Propane or Natural)	-
Do not order bolts, screws, washers or nuts. They are standard hardware in	tems and can be purchased at any local hardware store.
Shipments contingent upon strikes, fires and all causes beyond our control	

PARTS VIEW



SERVICE NOTES



Empire Comfort Systems, Inc. 918 Freeburg Ave. Belleville, IL 62220 PH: 618-233-7420 or 800-851-3153 FAX: 618-233-7097 or 800-443-8648 info@empirecomfort.com

www.empirecomfort.com

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